



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Unit :  
Examiner :  
Serial No. : 10/046,124  
Filed : December 28, 2001  
Inventor : Paul Bourguine  
Title : ADAPTATION OF  
: THE CALL SEQUENCE  
: BY ANALYSIS OF THE  
: HISTORY OF THE  
: PRECEDING  
: COMMUNICATION  
: SEQUENCES



22469

PATENT TRADEMARK OFFICE

Docket No.: 1394-01

Confirmation No.: 4810

Dated: October 28, 2002

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, DC 20231

Sir:

Prior to action on the merits, using marked-up versions of the Specification and Claims and also clean copies of such, we respectfully request consideration of the following amendments and remarks:

**In the Specification** (Marked-Up Version)

*Before the first paragraph on page 1, please insert the following:*

**RELATED APPLICATION**

This is a continuation of International Application No. PCT/FR00/01810, with an international filing date of June 28, 2000, which is based on French Patent Application No. 99/08331, filed June 29, 1999.

**FIELD OF THE INVENTION**

*Please replace the first paragraph on page 1 with the following:*

[The present] This invention pertains to computer-based telecommunications centers.

*Between the first and second paragraphs on page 1, please insert the following heading:*

## **BACKGROUND**

*Please replace the paragraph spanning pages 1 and 2 with the following:*

Office automation CTC applications pertain to unified messaging (fax, voice, e-mail, paging), the display of client information in relation to its telephone number or personal code and the management of calls on the screen. [We can also mention] Automatic Call Distribution (ACD), an automatic call distribution technique, [which] enables regulation of the flows of incoming calls placed in waiting queues. At present, many companies and independent workers are equipped with separate electronic messaging, voice mail and fax systems. However, a unified messaging system that groups together all of these services is more advantageous. Such a system makes it possible to listen to, read and display the three types of messages from a single platform and to do so in the desired order. Moreover, the system can be parameterized [so as] to receive messages in a given form and [to] transmit them in another form. Thus, by means of text conversion technology, electronic messages and faxes can be converted into voices messages accessible from a fixed or mobile telephone. The user has at his disposal a single telephone number. The computer then has to search for the party and to forward it the correct message adapted to the correct terminal.

*Please replace the first full paragraph on page 2 with the following:*

CTC increases productivity. Due to the evolution of the technologies, a CTC solution can operate, without central PABX, simply on a server equipped with voice cards. This "PCPABX" concept applies to small structures with at most 20 to 50 lines. Among its advantages, CTC promotes organization within the company. The circulation of paper is

reduced in favor of electronic information transfers. Tools enable recognition and orientation of the caller in relation to predefined scripts, [the] automatic calling up of the caller's file, [the] personalization of waiting messages and messaging outside of working hours, and workflow management for all of the organization's services.

*Please replace the first paragraph on page 3 with the following:*

[The purpose of the invention is] It would be advantageous to resolve this problem by [proposing] providing a method enabling improvement of the connection means and optimization of the number of calls required to connect a party.

*Between the first and second paragraphs on page 3, please insert the following:*

### **SUMMARY OF THE INVENTION**

This invention relates to a process for management of data transfer to a specific destination station having at least one real address including defining a virtual address of a destination station comprising an ordered sequence of real addresses of the destination station, sequentially searching through different addresses until obtaining a positive response establishing a communications channel, and transferring data to a multiplicity of telecommunications supports.

This invention also relates to a communication device including telephonic communications transport means and data transfer means, means for storing in a memory calls issued and/or received by a party, means for storing in the memory addresses enabling connection of the party and means for sequential calling of a destination station from a list of addresses, and means for the storage in the memory of a history of past

communication sequences and means for modeling optimal sequences for a multiplicity of telecommunications supports.

## **DETAILED DESCRIPTION**

*Please replace the second paragraph on page 3 with the following:*

[For this purpose the] The invention pertains to a process for the management of data transfers to a specific destination station possessing at least one real address comprising a step of definition of a virtual address of the destination station comprising the ordered sequence of the real addresses of said destination station, a step of sequential searching through the different addresses until obtain a positive response establishing a communications channel and a data transfer step. At each failure and/or success in establishing communication, the communication parameters are stored in memory and the data stored in memory are processed so as to define the optimal communication establishment parameters.

*Please replace the second full paragraph on page 5 with the following:*

In order to improve the number of successful calls, all of the parameters of a call are stored in memory. The most important parameters consist of the time and date of the call, [the] call address, and [the] success or failure of the call.

**In the Claims** (Marked-Up Version)

1. (Amended) [Process] A process for [the] management of data [transfers] transfer to a specific destination station [possessing] having a plurality of [at least one] real [address] addresses, the process being applied to a multiplicity of telecommunications supports and comprising:

[a step of definition of] defining a virtual address of [the] a destination station comprising [the] an ordered sequence of [the] real addresses of said destination station[.];

[a step of sequential] sequentially searching through [the] different real addresses until obtaining a positive response from a real address establishing a communications channel; and

[a data transfer step, characterized in that it is applied to a multiplicity of telecommunications supports]transferring data by the communication channel .

2. (Amended) [Process for the management of data transfers] The process according to claim 1, [characterized in that] wherein at each failure and/or success in establishing communication, [the] communication parameters[, such as the date, time and address of the communication,] are stored in a memory and [in that the] data stored in the memory are processed [so as] to define [the] optimal communication establishment parameters.

3. (Amended) [Process for the management of data transfers] The process according to claim 2, [characterized in that] wherein the processing performed on [the] data stored in the memory [consists of] is an iterative learning process.

4. (Amended) [Process for the management of data transfers] The process according to claim 3, [characterized in that] wherein the iterative learning process uses a neural network.

5. (Amended) [Process for the management of data transfers] The process according to claim 2, [characterized in that] wherein the processing performed on [the] data stored in the memory [consists of] is a statistical processing.

6. (Amended) [Device comprising telephonic communications transport means and data transfer means, means for storing in memory the calls issued and/or received by a party, as well as means for storing in memory the addresses enabling connection of a party as well as means for the sequential calling of a destination station from the list of its addresses, characterized in that it comprises means for the storage in memory of the history of past communication sequences and means for modeling the optimal sequences for a multiplicity of telecommunications supports] The process according to claim 2, wherein the communication parameters are selected from the group consisting of date, time and address.

**Please add the following new claim 7:**

7. (New) A communication device comprising:

- telephonic communications transport means and data transfer means;
- means for storing in a memory calls issued and/or received by a party,
- means for storing in the memory addresses enabling connection of the party,
- means for sequential calling of a destination station from a list of addresses,
- means for the storage in the memory of a history of past communication sequences;

and

- means for modeling optimal sequences for a multiplicity of telecommunications supports.

**In the Abstract**

Kindly enter the Abstract enclosed on a separate sheet into the Official File.

**Remarks**

We enclose herewith an English translation of the PCT Application as originally filed, together with preliminary amendments to place the Application into better form under U.S. Rules of Practice. We respectfully request entry of the above amendments into the Official File and early examination on the merits.

Respectfully submitted,



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**In the Specification** (Clean Copy)

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Thus, by means of text conversion technology, electronic messages and faxes can be converted into voices messages accessible from a fixed or mobile telephone. The user has at his disposal a single telephone number. The computer then has to search for the party and to forward it the correct message adapted to the correct terminal.

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It would be advantageous to resolve this problem by providing a method enabling improvement of the connection means and optimization of the number of calls required to connect a party.

*Between the first and second paragraphs on page 3, please insert the following:*

#### **SUMMARY OF THE INVENTION**

This invention relates to a process for management of data transfer to a specific destination station having at least one real address including defining a virtual address of a destination station comprising an ordered sequence of real addresses of the destination station, sequentially searching through different addresses until obtaining a positive response

establishing a communications channel, and transferring data to a multiplicity of telecommunications supports.

This invention also relates to a communication device including telephonic communications transport means and data transfer means, means for storing in a memory calls issued and/or received by a party, means for storing in the memory addresses enabling connection of the party and means for sequential calling of a destination station from a list of addresses, and means for the storage in the memory of a history of past communication sequences and means for modeling optimal sequences for a multiplicity of telecommunications supports.

## **DETAILED DESCRIPTION**

*Please replace the second paragraph on page 3 with the following:*

The invention pertains to a process for the management of data transfers to a specific destination station possessing at least one real address comprising a step of definition of a virtual address of the destination station comprising the ordered sequence of the real addresses of said destination station, a step of sequential searching through the different addresses until obtain a positive response establishing a communications channel and a data transfer step. At each failure and/or success in establishing communication, the communication parameters are stored in memory and the data stored in memory are processed so as to define the optimal communication establishment parameters.

*Please replace the second full paragraph on page 5 with the following:*

In order to improve the number of successful calls, all of the parameters of a call are stored in memory. The most important parameters consist of the time and date of the call, call address, and success or failure of the call.

**In the Claims** (Clean Copy)

1. (Amended) A process for management of data transfer to a specific destination station having a plurality of real addresses, the process being applied to a multiplicity of telecommunications supports and comprising:

defining a virtual address of a destination station comprising an ordered sequence of real addresses of said destination station;

sequentially searching through different real addresses until obtaining a positive response from a real address establishing a communications channel; and

transferring data by the communication channel .

2. (Amended) The process according to claim 1, wherein at each failure and/or success in establishing communication, communication parameters are stored in a memory and data stored in the memory are processed to define optimal communication establishment parameters.

3. (Amended) The process according to claim 2, wherein the processing performed on data stored in the memory is an iterative learning process.

4. (Amended) The process according to claim 3, wherein the iterative learning process uses a neural network.

5. (Amended) The process according to claim 2, wherein the processing performed on data stored in the memory is a statistical processing.

6. (Amended) The process according to claim 2, wherein the communication parameters are selected from the group consisting of date, time and address.

**Please add the following new claim 7:**

7. (New) A communication device comprising:

- telephonic communications transport means and data transfer means;
- means for storing in a memory calls issued and/or received by a party,
- means for storing in the memory addresses enabling connection of the party,
- means for sequential calling of a destination station from a list of addresses,
- means for the storage in the memory of a history of past communication sequences;

and

- means for modeling optimal sequences for a multiplicity of telecommunications supports.

**In the Abstract** (Clean Copy)

A process for management of data transfer to a specific destination station having at least one real address including defining a virtual address of a destination station comprising an ordered sequence of real addresses of the destination station, sequentially searching through different addresses until obtaining a positive response establishing a communications channel, and transferring data to a multiplicity of telecommunications supports, and a communication device including telephonic communications transport means and data transfer means, means for storing in a memory calls issued and/or received by a party, means for storing in the memory addresses enabling connection of the party and means for sequential calling of a destination station from a list of addresses, and means for the storage in the memory of a history of past communication sequences and means for modeling optimal sequences for a multiplicity of telecommunications supports.